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10/051,199	01/22/2002	Yoichi Asano	Q68167	7169

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EXAMINER

CANTELMO, GREGG

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 10/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/051,199

Applicant(s)

ASANO ET AL.

Examiner

Gregg Cantelmo

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 14-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of the species elections to Group I in Paper No. 10 is acknowledged.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
3. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Information Disclosure Statement

4. The information disclosure statement filed May 8, 2002 has been placed in the application file and the information referred to therein has been considered as to the merits.

Drawings

5. The drawings received January 2, 2002 are acceptable for examination purposes.

Art Unit: 1745

Specification

6. The abstract of the disclosure is objected to because it exceeds 150 words. A 150-word limit has been imposed by the USPTO to conform to PCT applications and Pre-Grant Publications. See 37 CFR 1.72 and rule changes applied thereto. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(f) he did not himself invent the subject matter sought to be patented.

8. Claims 1, 7 and 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. patent No. 5,795,496 (Yen).

Yen discloses a polymer electrolyte membrane and fuel cell comprising both SPEEK and SPES (col. 10, ll. 34-37 as applied to claims 1 and 11-13).

The prior art product has the same sulfonated polyarylene monomer in the same molar proportion and thus the product is expected to have the same ion exchange capacity as recited in claims 7 and 10).

9. Claims 1, 7 and 10-13 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. patent No. 6,465,136 (Fenton).

Yen discloses a polymer electrolyte membrane and fuel cell comprising sulfonated PEEK, sulfonated poly(phenylene oxide) and combinations thereof (col. 4, ll. 43-54 as applied to claims 1 and 11-13).

The prior art product has the same sulfonated polyarylene monomer in the same molar proportion and thus the product is expected to have the same ion exchange capacity as recited in claims 7 and 10).

10. Claims 1-13 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. patent No. 6,556,626 (Goto).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Goto claims a composite polymer electrolyte membrane and fuel cell comprising monomer A: 4,4'-bis (4-chlorobenzoyl) diphenylether and monomer B: 2,5,-dichloro-4-

Art Unit: 1745

phenoxybenzophenone. The resultant mixture is sulfonated (claim 5, as applied to claims 1, 3, 4, and 6-13).

The first monomer is present in a mol amount between 3-60 mol % and the second monomer is present in a mol amount between 40-97 mol % (claim 1 as applied to claims 2, 3, 5, 6, 8, 9).

The electron attractive group includes -CONH-, -COO-, -SO-, etc. (claim 2 as applied to claim 4).

The prior art product has the same sulfonated polyarylene monomer in the same molar proportion and thus the product is expected to have the same ion exchange capacity as recited in claims 7 and 10).

11. Claims 1-13 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication No. 2002/0164513 (US '513).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

US '513 claims a composite polymer electrolyte and fuel cell comprising a sulfonated polyarylene polymer and hydrocarbon polymer sulfonate other than a sulfonated polyarylene polymer (claim 12 as applied to claims 1 and 13).

The amount of the two polymers are the same as the instant claims (claim 12 as applied to claims 2, 3, 5, 6, 8 and 9).

The ionic conductivity overlaps (claim 16 as applied to claims 7 and 10).

The second polymer is sulfonated polyetheretherketone (claim 19 as applied to claims 11 and 12).

12. Claims 1-13 are rejected under 35 U.S.C. 102(f) because the applicant does not appear to have invented the claimed subject matter.

See items 8 and 9 above, incorporated herein.

Double Patenting

13. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

14. Claims 1-13 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6,555,626 (Goto). Although the conflicting claims are not identical, they are not patentably distinct from each other.

In the event that Applicant overcomes the 102(e) rejection above, the claimed invention of Goto are not held to be patentably distinct from one another.

See item 10 above, incorporated herein.

15. Claims 1-13 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 12-26 of U.S. patent Application Publication No. 2002/0164513 (US '513). Although the conflicting claims are not identical, they are not patentably distinct from each other.

In the event that Applicant overcomes the 102(e) rejection above, the claimed invention of US '513 are not held to be patentably distinct from one another.

See item 11 above, incorporated herein.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USPAT 5,403,675 and USPAT 6,248, 469 each disclose of sulfonated polyphenylene SPEs.


17. It appears that the instant application has joint assignees (Honda and JSR) whereas each of the references applied in the rejections above are from either Honda (US '513) or JSR (Goto). For such reasons the assignment of each of these are not identical and hence rejections under 35 USC § 102 are applicable pending applicant's response.

Art Unit: 1745

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregg Cantelmo whose telephone number is (703) 305-0635. The examiner can normally be reached on Monday through Thursday from 8:00 a.m. to 5:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan, can be reached on (703) 308-2383. FAX communications should be sent to the appropriate FAX number: (703) 872-9311 for After Final Responses only; (703) 872-9310 for all other responses. FAXES received after 4 p.m. will not be processed until the following business day. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Gregg Cantelmo
Patent Examiner
Art Unit 1745

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October 19, 2003